Emerging Security Challenges Division
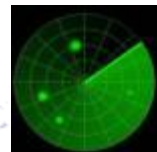
Science for Peace & Security (SPS) Programme

Presentation by:

Dr. Danka Švihlová
**(Faculty of Economics
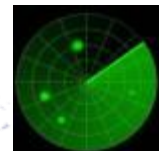Matej Bel University
Slovakia)**

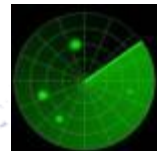## Member of the NATO Independent Scientific Evaluation Group (ISEG)

- **Outline**

  – **Emerging Security Challenges Division (ESCD)**

  – **Science for Peace and Security (SPS) Programme**

  – **SPS Objectives**

  – **Key Priorities**

  – **Governance**

  – **Independent Scientific Expert Group (ISEG)**

  – **A Unique Network of Cooperation**

 – **Mechanisms**

  – **How to apply?**

- **Emerging Security Challenges Division (ESCD)**

    – Recently established to address emerging security challenges in a comprehensive and cross-cutting way.

    – Composed of five sections:
        - Counter Terrorism Section
        - Cyber Defence Section
        - Energy Security Section
        - Weapons of Mass Destruction Non-Proliferation Centre
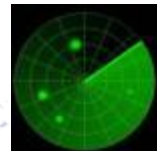   - Strategic Analysis Capability Unit

- **Science for Peace and Security Programme (SPS)**

  - A key policy tool for cooperation with NATO's partners on security-related, NATO-relevant civil science

  - SPS activities are aligned with NATO's Strategic Objectives

  - Maintains scientific excellence through peer-review by independent scientific experts

  - Initiates regional cooperation

  - Acts as a catalyst
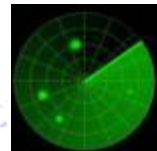
- ## SPS Objectives

  - **To establish civil collaboration** between NATO countries and partners

  - **To contribute to solving problems** affecting societies in partner countries

  - **To promote NATO's values** and image in targeted communities in partner countries and society at large

  - **To encourage young scientists** – "Leaders of Tomorrow"

  - **To contribute to stability and peace**, e.g. by promoting regional cooperation

  - **To provide seed money for seed projects** by providing the basis for addressing priority needs
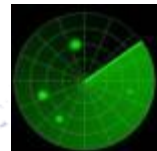
- **SPS Key Priorities (currently under review)**

  - Are in line with NATO's Strategic Concept

  - Address key environmental and resource constraints

  - Facilitate mutually beneficial cooperation on issues of common interest, including international efforts to meet Emerging Security Challenges

  - Enhance support for NATO-led operations and missions

  - Enhance awareness on security developments, including through early warning, with a view to preventing crises
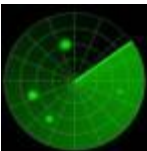
- **SPS Key Priorities** (currently under review)

    - Counter-Terrorism
    - Energy Security
    - Cyber Defence
    - Defence Against CBRN Agents
    - Environmental Security
    - Support for NATO-led Operations and Missions
    - Security-related Advanced Technology
    - Border and Port Security
    - Mine and Unexploded Ordnance Detection and Clearance
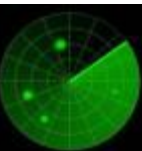   - Human and Societal Dynamics

- **SPS Key Priorities** (currently under review)

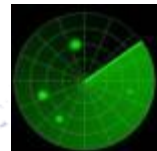 **Information on SPS Key Priorities is available from SPS website at:**

  http://www.nato.int/science

  (following link to "Funding Opportunities")

- ## **SPS Programme - Governance**

- **NATO Political and Partnerships Committee**

  – **Provides strategic and political guidance + Final decision**

- **Assistant Secretary General - ESCD**

  – **Responsible for the management of the SPS Programme**

- **ESC/SPS Working Group**

  – **Representatives of the 5 ESCD sections co-ordinate SPS activities with ESCD sections' activities, and develop new top-down activities**

- **Independent Scientific Evaluation Group (ISEG)**

  - **Multi-disciplinary**

  - **Peer reviews SPS applications**

  - **Members nominated by NATO Nations, and selected according to SPS Key Priorities**

  - **Supported by Pool of scientific experts (to be used on a case-by-case basis as scientific referee)**
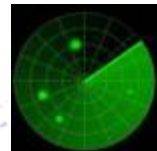
- ## SPS - A Unique Network of Cooperation

  - ### NATO countries
    Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Turkey, United Kingdom, United States

  - ### NATO's partner countries eligible for NATO Funding
    Algeria, Armenia, Azerbaijan, Belarus, Bosnia & Herzegovina, Egypt, Georgia, Israel, Jordan, Kazakhstan, Kyrgyz Republic, Mauritania, Moldova, Mongolia, Montenegro, Morocco, Russian Federation, Serbia, Tajikistan the former Yugoslav Republic of Macedonia*, Tunisia, Turkmenistan, Ukraine, Uzbekistan

  - ### NATO's partner countries eligible to participate on a self-funding basis
    ### (may receive funding if ARW Speaker / ASI Lecturer / ATC Specialist)

    Australia, Austria, Bahrain, Finland, Ireland, Japan, Kuwait, Malta, New Zealand, Qatar, Sweden, Switzerland, the Republic of South Korea, the United Arab Emirates

  - ### NATO's partner countries eligible for NATO Funding on a case-by-case basis
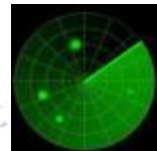   **Afghanistan, Iraq and Pakistan**

    * Turkey recognizes the Republic of Macedonia with its constitutional name.

- **SPS Grant Mechanisms: Top-Down & Bottom-up**

  - **Multi-Year - Knowledge application**

    – **Science for Peace Projects (SfP)**

    Short-term - Knowledge management

    - **Workshops** - **Advanced Research Workshop (ARW)**

    - **Training** - **Advanced Study Institute (ASI)**
   **Advanced Training Course (ATC)**

- **SPS Grant Mechanisms**

Multi-Year Science for Peace (SfP) Project

– Grants to collaborate on multi-year applied R&D projects offering support to cover project-related costs such as scientific equipment, computers, software and training of project personnel.

- *Remediation Processes in Uranium and other Mining Explorations (983311)*

  Portugal, Tunisia, Morocco, Germany
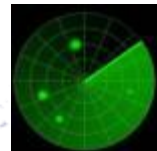
This project is supported by: The NATO Science for Peace and Security Programme

Bio-Remediation of Toxic Soil Left Over from Uranium and Other Mining Activities in Portugal, Tunisia and Morocco

This project is aiming at isolating such metal resistant bacteria, characterising their metal resistant genetic elements and using them to make new plants resistant to toxicity. The efficiency of new plants to grow on contaminated mine areas, to stabilise heavy metals and to reduce the soil toxicity will be evaluated in laboratories and in field trials.

**Mines where iron and copper were extracted.**

In situ ecotoxicological evaluation of mine soils.

- **SPS Grant Mechanisms**

Advanced Research Workshop (ARW)

- 2-3 day meeting

- 20–50 participants

- Grants to organise expert workshops where advanced-level, intensive discussions aim at finding solutions for today's security challenges.

- Funding determined on case-by-case basis, but average amount ~ Eur 30,000
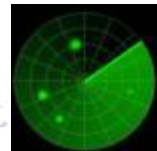
- **SPS Grant Mechanisms**

  <u>**Advanced Study Institute (ASI)**</u>

  - **Average 7 day meeting**

  - **12-15 Lecturers   /   60-80 Students**

  - **Grants to organise high-level tutorial courses to convey the latest developments in a subject of relevant to NATO to an advanced-level audience.**

  - **Funding determined on case-by-case basis, but average amount ~ Eur 60,000**
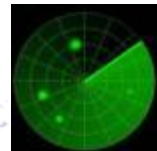
- **SPS Grant Mechanisms**

Advanced Training Course (ATC)

- 5 - 7 day meeting

- 3-4 Specialists from at least two different NATO countries

- 30-50 Trainees from NATO partner countries

- Funding determined on case-by-case basis, but average amount ~ Eur 60,000
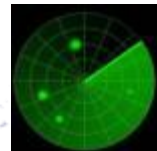
- **Examples of recent SPS Activities**

  "Environmental Security in the Arctic Ocean" (983732)
  13-15 October 2010
  Cambridge, UK
  UK – Russia

  "Metamaterials and Plasmonics : Environmental Sensing and Information Security" (983966)
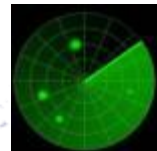 22-25 February 2010
  Cairo, Egypt
  France – Egypt

  "The New Challenges to Global Security" (984385)
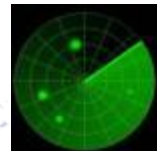 28 November 2011
  Brussels, Belgium

- ## How to Apply

  - **Identify a topic which you wish to open to international cooperation**

  - **Determine the appropriate mechanism**

  - **Find a qualified collaborator:**
    - **… from a partner country if you are a NATO-country scientist**
    - **… or vice versa**

  - **Download "Notes for Applicants" and "Application Form" from the SPS website:**
    http://www.nato.int/science

  - **Check before completing form!**
    - **Eligibility of the partner participants – eligible for NATO funding or self-funding?**
    - **Are all previous awards closed?**

  - **Complete the application form with your collaborator and submit to**
    sps.applications@hq.nato.int

Thank you for your attention!